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10/018,339	12/19/2001	Hans-Peter Harz	50091	1787

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EXAMINER

HANLEY, SUSAN MARIE

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,339

Applicant(s)

HARZ ET AL.

Examiner

Susan Hanley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-17 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicants amendment and response filed March 17, 2005 and July 6, 2005 have been entered.

Claims 1-4, 6-17 and 19-23 are pending.

Double Patenting

Claims 1-4, 7, 10-16, 19, 20, 22 and 23 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-8 and 14-19 of copending Application No. 10/125,272.

Applicant did not make a response because the rejection is provisional.

The rejection stands for the reasons of record given in the Office Action of 6/24/2004.

Claims 1-4, 8-10, 12-16 and 19 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 24-27 of copending Application No. 10/280,324 in view of Itoh et al. (US 5,080,917).

Applicant argues that Itoh does not teach or suggest the claim limitations. Applicant asserts that new claims 22 and 23 are directed to improving pelleting stability. Applicant asserts that Itoh teaches a coating for the purpose of the delayed release of a physiologically active substance and increasing stability of the granulate in the ruminant stomach. Applicant puts forth that this does not teach a method to improve pelleting stability. Applicant further argues that Itoh teaches a coating containing 50% by weight of a water insoluble substance and that this is unsuitable for coating a granule to be pelletized. Applicant asserts that the water insoluble substance taught by Itoh is intended to support the disintegration of the coating agent in the ruminant stomach. Applicant further asserts that although a coating of the granulate is taught in the specification of '324, a coating limitation is not recited in the claims. Thus, the coating taught in the specification of '324 cannot be relied upon for making the instant

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double patent rejection. Applicant argues that the claims of '324 are drawn to the incorporation of HPMC, PVA, HEC and edible oils into the granule and not for coating of the granule.

Responding to Applicant's argument that the claims of '324 and Itoh do not teach a method of increasing pelleting stability, Itoh teaches a polymer composition comprising ethyl cellulose, a high molecular weight polymer and a water-insoluble substance such as polyvinyl acetate (col. 3, lines 57-58) which is very high melting. In claim 10, Itoh discloses that the ratio of the coating agent to the physiological substance is 5:100 to 100:100. Assuming that the additive recited in instant claim 23 is the enzyme in the granule, Itoh's ratio of 5 to 100% overlaps the claimed ratio in instant claim 23. Thus, Itoh's disclosure of coating the granule with a polymer in an amount that meets the claimed range inherently practices the method in the preamble of instant claim 22.

In response to Applicant's argument that Itoh coats the granules for the purpose of delayed release of a physiologically active substance and increasing stability of the granulate in the ruminant stomach, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Responding to Applicant assertion that Itoh teaches a coating containing 50% by weight of a water insoluble substance which is unsuitable for coating a granule to be palletized, Applicant is directed to col. 4, lines 4-6 of Itoh wherein the weight of the water-insoluble substance to ethyl cellulose can range from 1:0.1 to 1:20 (preferably from 1:0.5 to 1:2). The coating taught by Itoh comprises ethyl cellulose, a high molecular weight compound which is a polymer such as methacrylate and the water-insoluble substance (claim 1 of Itoh). The ratio of ethyl cellulose to the high molecular weight compound is 1:05 to 1:2 (claim 6 of Itoh). The ratio of the water-insoluble compound is the ratio of said water-insoluble compound to the coating with all of the components: the high molecular weight compound, ethyl cellulose and the water-insoluble compound. Given the ratios *supra*, the amount of water-insoluble compound can be much less than 50% of the total. Furthermore, the water insoluble compounds can be resins such as polyvinyl acetate (col. 3,

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lines 57-58) which is very high melting and would survive a pelleting procedure even if it did comprise 50% of the coating. Responding to Applicant's assertion that the specification of '324 was relied upon to provide motivation for the coating of the claimed granulates, this is incorrect. Itoh was relied upon for the motivation to coat the granules: Itoh et al. teach that it is desirable to coat enzyme-containing granules that are suitable for animal feed because the polymer coating protects the enzyme from acidic degradation in the animals' stomach (col. 1, lines 12-24). Applicant is reminded that the fact that Itoh has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Claims 1-4, 22 and 23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 8 and 12, of copending Application No. 10/500,144 in view of Itoh (US 5,080,917).

The instant claims are drawn to a method of preparing a polymer-coated, granulated-enzyme containing pelletizable feed additive.

The claims of '500 are drawn to a method of preparing an enzyme-containing granulate for use as an animal feed wherein the granulate is coated with a polyolefin which is an organic polymer as required by the instant claims. The claims of '500 are further drawn using a melt process to apply a dispersion of the polyolefin in water wherein the polyolefin dispersion contains 10 to 60% polyolefin. These claim limitations meet those of instant claims 22 and 23 because the claimed method of '500 carries out the same steps as instant claim 22 and will result in a granule having improved pelleting stability.

The claims of '500 do not teach the limitations of instant claims 1-4 which are related to the production of the granulate.

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Itoh teaches the preparation of an enzyme-core granulate by conventional means which include granulating, drying and making the granule in a spherical shape (col. 4, lines 15-55) and claims 1-4 of the Itoh patent.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use conventional methods of prepare an enzyme granulate as claimed by '500. The ordinary artisan would have been motivated to do so because such methods are recognized by the art as tried and true. The ordinary artisan would have had a reasonable expectation that conventional granulation preparation methods would successfully guide the ordinary artisan in making a suitable granulate for '500 because conventional methods are well known to work.

This is a provisional obviousness-type double patenting rejection.

Claims 1-4, 8-10, 12-16 and 19 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2 and 4 of U.S. Patent No. 6,500,426 in view of Itoh (US 5,080,917).

'426 claims a method of making, and a product thereof, an enzyme-containing granulate suitable for use in an animal feed. '426 does not disclose that the granules are coated with a polymer.

Itoh et al. disclose polymer-coated granules for animal feed and a method of making said granules. The core can comprise a starch and an active substance. Itoh et al. teach that it is desirable to coat enzyme-containing granules that are suitable for animal feed because the polymer coating protects the enzyme from acidic degradation in the animal's stomach (col. 1, lines 12-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the enzyme-containing granules taught by '426 with a polymeric substance. The ordinary artisan would have been motivated to do so because such a coating serves to protect the enzyme from acidic degradation in the stomach of the animal. Hence, more of the enzyme would survive the first pass effect and would be available to cause the desired therapeutic effect in the animal. The ordinary artisan would

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have had a reasonable expectation that an enzyme-containing granule could be successfully coated by a polymer and subsequently be used as animal feed because Itoh et al. teaches that polymer-coated enzyme-containing granules are well known in the art and that their invention is merely an improvement on well known technology.

Claim Rejections - 35 USC § 112

Claim 11-16, 19 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: Claim 11 is drawn to a method of pelleting a granulate but the claim lacks a pelleting step.

Claim 19 is rejected because the limitation "during pelletizing" lacks antecedent basis in claim 11.

Claim 23 is rejected because the limitation "additive" in the last line of the claim lacks antecedent basis in claim 22.

Claim Rejections - 35 USC § 102

Claims 1-4, 8-16, 20, 22 and 23 stand rejected under 35 U.S.C. 102(b) as being clearly anticipated by Itoh et al. (US 5,080,917) in light of Webster's Dictionary.

Applicant argues that Itoh does not disclose the instantly claimed coated granules because the ordinary artisan would have realized from the specification that while the polymer coating of the instant invention can have minor amounts of other constituents, the coating must be adapted to pelleting processes which heats the products. Applicant continues that a person skilled in the art would have realized that the coating should be heat resistant. Applicant asserts that Itoh does not disclose pelletizable granules and is directed to producing a coating that is stable in the ruminant stomach. Applicant asserts that water insoluble substances such as 14 carbon fatty acids used in a coating in an amount of 50% by weight are unsuitable for coating a granule to be pelletized.

Responding to Applicant assertion that Itoh teaches a coating containing 50% by weight of a water insoluble substance which is unsuitable for coating a granule to be palletized. Applicant is directed to col. 4, lines 4-6 of Itoh wherein the weight of the water-insoluble substance to ethyl cellulose can range from 1:0.1 to 1:20 (preferably from 1:0.5 to 1:2). The coating taught by Itoh comprises ethyl cellulose, a high molecular weight compound which is a polymer such as methacrylate and the water-insoluble substance (claim 1 of Itoh). The ratio of ethyl cellulose to the high molecular weight compound is 1:0.5 to 1:2 (claim 6 of Itoh). The ratio of the water-insoluble compound is the ratio of said water-insoluble compound to the coating with all of the components: the high molecular weight compound, ethyl cellulose and the water-insoluble compound. given the ratios *supra*, the amount of water-insoluble compound can be much less than 50% of the total. Furthermore, Applicant is using one embodiment, the use of fatty acids having 14 carbons, to exemplify the supposed unsuitability of the water-insoluble compound disclose by Itoh. The water insoluble compound can also be a resin such as polyvinyl acetate (col. 3, lines 57-58) which is very high melting and would survive a pelleting procedure even if it did comprise 50% of the coating. Responding to Applicant's assertion that Itoh does not disclose pelletizable granules and is directed to producing a coating that is stable in the ruminant stomach, the prior art method of making the enzyme-containing polymer-coated granules meets the limitations of the instant claims since they are prepared by the same method steps have the same components in the same arrangement as the granules of the instant invention. Thus, the enzyme-containing polymer-coated granules disclosed by Itoh have the same properties as the granules as the instant invention and, therefore, are pelletizable.

The disclosure by Itoh et al. meets the limitations of amended claims 11, 20 and 22-23. Amended claim 11 is drawn to a method of pelleting. However, the claim lacks a step for pelleting. Therefore, rejection made against the claim are on the basis of the remaining claimed steps of the claim which are directed to making a polymer-coated granulate.

Claim 20 is drawn to an organic polymer that is filler-free. According to the MPEP 2111, during patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (discussed below); Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004). According to Webster's Dictionary a filler is defined as "something added to augment weight, size or space" (p. 487). The coating taught by Itoh et al. comprises a ethyl cellulose, a high molecular weight compound which is a polymer such as methacrylate and the water-insoluble substance (claim 1 of Itoh). The purpose of the water-insoluble compound is to form a stronger coating layer (col. 3, lines 36-46). Therefore, the limitation of instant claim 20 is met by Itoh because none of the components meet the definition of a filler. The disclosure by Webster's is a supporting reference and properly used in a rejection under of U.S.C. 102 since it describes the definition of a filler. MPEP 2131.01.

Itoh meets the limitations of instant claims 22 and 23 because he teaches a polymer composition comprising ethyl cellulose, a high molecular weight polymer and a water-insoluble substance such as polyvinyl acetate (col. 3, lines 57-58) which is very high melting. In claim 10, Itoh discloses that the ratio of the coating agent to the physiological substance is 5:100 to 100:100. Assuming that the additive recited in instant claim 23 is the enzyme in the granule, Itoh's ratio of 5 to 100% overlaps the claimed ratio in instant claim 23. Thus, Itoh's disclosure of coating the granule with a polymer in an amount that meets the claimed range inherently practices the method in the preamble of instant claim 22.

Claims 1-4, 6, 7 and 10-16 stand rejected under 35 U.S.C. 102(e) as being clearly anticipated by De Lima et al. (US 6,136,772) in light of Markussen (US 4,106,991).

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Applicant argues that De Lima does not teach the claimed method because the pelletization taught by De Lima refers to the preparation of the granular core which does not contain the enzyme. Applicant asserts that the coating step of De Lima is option and may comprise one or more constituents. Applicant argues that De Lima disclose a coating layer that predominantly contains inorganic material and minor proportions of PEG. Applicant asserts that the coatings taught by De Lima would not lead to a melt, a solution or a dispersion, as in the instant application. Applicant asserts that the claimed coating if preferably filler-free, which excludes kaolin. Applicant asserts that the instant invention would not have been obvious over Itoh because the patents are directed to different purposes.

Responding to Applicant's argument that the pelletization taught by De Lima refers to the preparation of the granular core which does not contain the enzyme, Applicant is directed to col. 3, lines 32-38 of De Lima which states that the preferred embodiments of enzyme-containing granules are granules wherein at least part of the enzyme present is absorbed into the core of the granule. This meets the limitation of part (1) of instant claim 1 because a support suitable for feedstuff and at least one enzyme form a crude granulate. The claim does not exclude that the support is already in granulate form.

Responding to Applicant's assertion that the coating of De Lima can contain other constituents that can be filler, that the organic polymer is used in minor proportions and that the coatings taught by De Lima would not lead to a melt, a solution or a dispersion, the use of other constituents in the coating material taught by De Lima is an embodiment that does not limit the disclosure by De Lima which teaches that the coating layer can comprise 0.5 to 50% by weight of the finished granule. De Lima et al. disclose that the coating can comprise polyethylene glycol, and can be utilized in the manner described by Markussen et al. (US 4,106,991; col. 11, lines 20-25). Markussen et al. teaches that PEG 1500 or PEG 6000 can be sprayed on hot granulates to form a outer coating (col. 16, lines 12-22). The PEG taught by De Lima and Markussen do not have any additives and thus, meet the "filler-free" limitation of new claim 20.

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Claims 1-4 and 19-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Barendse et al. (US 6,500,426).

The applied reference has a common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Barendse discloses a method for making animal feed composition comprising an enzyme-containing granule. The enzyme can be a phytase. The granulate can be prepared on a fluidized-bed granulator. The granulate can be coated by a polymer prior to pelleting (col. 5, lines 62-68).

Claim Rejections - 35 USC § 103

Claim 9 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. (US 2002/0034549) in view of Maruyama et al. (JP 408333239 A and Machine Translation).

Applicant argues that dependent claim 9 is novel and nonobviousness for the same reasons as instant claim 1. Argument asserts that Becker et al. would not have motivated the skilled artisan to practice the present invention because Becker is not directed to improving pelleting stability but rather improving particle appearance, strength, etc. Applicant asserts that Maruyama is not analogous with the present invention because it deals with the manufacture of enteric preparations.

In response to applicant's argument that Becker is not directed to stabilizing an enzyme-containing granule for pelleting, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Responding to Applicant's assertion that Becker does not disclose pelletizable granules by the method of claim 1, Becker teaches a method of making the enzyme-containing polymer-coated granules

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that meets the limitations of the instant claims since they are prepared by the same method steps have the same components in the same arrangement as the granules of the instant invention. Thus, the enzyme-containing polymer-coated granules disclosed by Itoh have the same properties as the granules as the instant invention and, therefore, are pelletizable. In response to applicant's argument that the disclosures by Becker and Maruyama represent nonanalogous art, it has been held that a prior art reference must either be in the field of Applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the prior art references are directed to making coated granules which is clearly related to the field of endeavor of this application.

Claims 1-4, 6-17 and 19-23 stand provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/125,272 which has a common assignee with the instant application.

Applicant has not traversed this rejection. Therefore the claims stand rejected for the reasons of record.

Claims 1-4, 6-17 and 19-23 stand provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/280,324 which has a common assignee with the instant application in view of Itoh et al. US 5,080,917.

Applicant has not traversed this rejection. Therefore the claims stand rejected for the reasons of record.

Claims 1-4, 22 and 23 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/500,144 which has a common assignee with the instant application in view of Itoh et al. US 5,080,917.

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'500 discloses a method of preparing an enzyme-containing granulate for use as an animal feed wherein the granulate is coated with a polyolefin which is an organic polymer as required by the instant claims. '500 further teaches using a melt process to apply a dispersion of the polyolefin in water wherein the polyolefin dispersion contains 10 to 60% polyolefin. This disclosure meets those of instant claims 22 and 23 because the method of '500 carries out the same steps as instant claim 22 and will result in a granule having improved pelleting stability.

'500 does not teach the limitations of instant claims 1-4 that are related to the method of production of the granulate.

Itoh teaches the preparation of an enzyme-core granulate by conventional means which include granulating, drying and making the granule in a spherical shape (col. 4, lines 15-55) and claims 1-4 of the Itoh patent.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the convention methods of prepare an enzyme granulate as disclosed by '500. The ordinary artisan would have been motivated to do so because such methods are recognized by the art as tried and true. The ordinary artisan would have had a reasonable expectation that conventional granulation preparation methods would successfully guide the ordinary artisan in making a suitable granulate for '500 because conventional methods are well known to work.

Claims 1-4, 8-17, 20, 22 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. (US 5,080,917), as applied to claims 1-4, 8-16, 20, 22, in further view of Johnson et al. (US 4,976,977) and Jacobsen (US 5,391,371)

The disclosure of Itoh is discussed *supra*.

Itoh does not teach a pellet comprising a polymer-coated enzyme-containing granule.

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Johnson teaches that it is desirable to pellet particulate matter intended as an animal feed because these materials are finely divided and difficult-to-handle. Pelleting using heat, moisture and pressure to make larger pelletized material.

Jacobsen discloses that coating an enzyme containing T-granulate coated with a coating agent comprising a high melting wax or fat considerably improves the stability of the enzyme in the pelleting process (claim 1 and the abstract of Jacobsen). Jacobsen discloses that T-granulate having enzymes have been traditionally coated by PEG (col. 1, lines 44-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to pellet the a polymer-coated enzyme-containing granules taught by Itoh. The ordinary artisan would have been motivated to do so because pelleting small particles such as granules makes a larger pellet that is easier to handle and more palatable to the animal. The ordinary artisan would have been further motivated to pellet the coated granule of Itoh because coating agents such as organic polymers (PEG) are known to stabilize enzyme-containing granulates for the pelleting process. The ordinary artisan would have had a reasonable expectation that the a polymer-coated enzyme-containing granules of Itoh could be formed into a pellet because the polymers that coated the enzyme-containing granulate comprise high molecular weight polymers that are high melting. This type of coating could easily withstand the pelleting process so that the resulting pellets would not stick together.

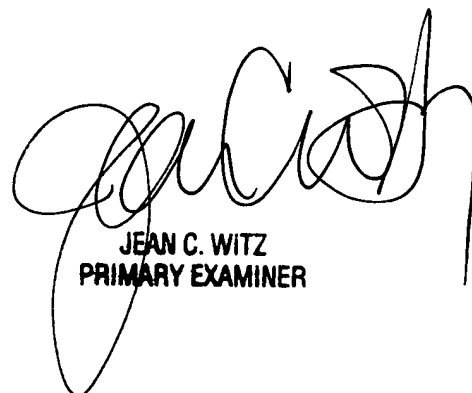
No claim is allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Hanley whose telephone number is 571-272-2508. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEAN C. WITZ
PRIMARY EXAMINER